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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 09/754,377 | 01/05/2001 | Katsuhiko Sumita | 2224-0181P | 3526 |
| 2292 | 7590 | 02/24/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | SHEWAREGED, BETELHEM | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1774 | |

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/754,377

Applicant(s)SUMITA ET AL. **Examiner**

Betelhem Shewareged

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9,13,14,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 is/are allowed.
- 6) ☒ Claim(s) 1,13,14 and 16 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Applicant's response filed on 12/03/2003 has been fully considered. Claims 1, 3, 4, 6, 7, 9, 13, 14, 16 and 17 are pending.

Claim Rejections - 35 USC § 102

2. Claims 1, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Luckenbach (US 4,803,256).

Luckenbach discloses a method of treating a polyester textile in order to enhance the printability (col. 4, line 33) of the polyester by contacting the polyester with an active substance such as aromatic dicarboxylic acid (claims 4 and 13). The textile is woven (claim 9). With respect to solubility value of the organic acid it is elementary that the mere recitation of newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. *In re swinehart et al.*, 169 USPQ 226 at 229. Since the Luckenbach reference teaches all of Applicant's claimed compositional and positional limitations, it is inherent that the reference article function in the same manner claimed by Applicant. The burden is upon Applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

Claim Rejections - 35 USC § 103

3. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luckenbach (US 4,803,256), as applied to claims 1, 13 and 16, above.

Luckenbach does not disclose the claimed amount of the active substance. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the amount of the active substance in order to optimize the printability of the surface of the textile. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

Response to Arguments

4. Applicant's argument is based on that the prior art does not disclose aromatic dicarboxylic acid as the active substance; instead it discloses a copolymer of (A) ethylene glycol polyethylene glycol, (B) aromatic dicarboxylic acid and (C) alkali metal salt of a sulfonated aromatic dicarboxylic acid as the active substance. This argument is not persuasive because even though the copolymer of (A) ethylene glycol polyethylene glycol, (B) aromatic dicarboxylic acid and (C) alkali metal salt of a sulfonated aromatic dicarboxylic acid is not equivalent to the claimed aromatic dicarboxylic acid, the aromatic dicarboxylic acid is not recited in all the claims or at least in the independent claim 1. Furthermore, definition of an organic acid in the specification does not expressly exclude the prior art's active substance containing aromatic dicarboxylic acid.

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Applicant further argues that Luckenbach fails to teach the technical relation of printability and the aromatic dicarboxylic acid as well as the function or role of the aromatic dicarboxylic acid. This is not persuasive because Luckenbach discloses a method of treating a textile so as to enhance printability of the textile see col. 4, line 33 of Luckenbach.

Allowable Subject Matter

5. Claims 3, 4, 6, 7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest art Hamada et al. (US 6,177,181 B1) neither teaches nor suggests its porous membrane has an organic acid with certain solubility as the claimed invention.
6. Claim 17 is allowed. The closest art Luckenbach fails to disclose an aromatic dicarboxylic acid as the active substance.

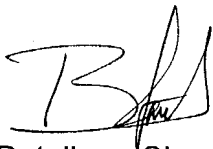
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'B. Shewareged', with a stylized flourish at the end.

Betelhem Shewareged
February 15, 2004.